AMENDMENT

1 (withdrawn). A method for delivering a polynucleotide into a human stem cell, said method comprising the steps of:

associating the polynucleotide to a human sperm cell through a linker; and

effecting *in vitro* fertilization of a human oocyte with the human sperm cell to form a zygote.

2 (withdrawn). The method in claim 1 further comprises culturing and establishing an embryonic stem cell from the zygote

3 (withdrawn). The method in claim 2 further comprises:

screening cells derived from the embryonic stem cell for immunological compatibility with a patient.

4 (withdrawn). The method in claim 2 wherein the embryonic stem cell has the ability to differentiate into different cell types selected from the group consisting of: myoblasts, hematopoietic stem cells, and neural stem cells.

5 (withdrawn). The method in claim 1 wherein the polynucleotide is able to express a gene product selected from a group consisting of an RNA or a protein.

6 (withdarwn). The method in claim 1 wherein the polynucleotide is associated with an external surface of the human sperm cell through the linker.

7 (withdrawn). The method in claim 1 wherein the linker is an antibody.

8 (withdrawn). A vector comprising:

a human sperm cell; and

a polynucleotide linked to the human sperm cell through a linker.

9 (withdrawn). The vector in claim 8 wherein the polynucleotide is introduced into a human oocyte during fertilization by the human sperm cell.

10 (withdrawn). The vector in claim 8 further comprising an embryonic stem cell derived from fertilization of the human sperm cell with a human oocyte.

11 (withdrawn). The vector in claim 8 wherein the polynucleotide is able to express a gene product selected from a group consisting of an RNA or a protein.

12 (withdrawn). The vector in claim 8 wherein the polynucleotide is associated to an external surface of the human sperm cell through the linker.

13 (withdrawn). The method in claim 8 wherein the linker is an antibody.

14 (withdrawn). An embryonic stem cell derived from fertilization of a human oocyte with a human sperm cell linked to a polynucleotide through a linker.

15 (withdrawn). The embryonic stem cell in claim 14 wherein the embryonic stem cell is immunologically compatible with a patient.

16 (withdrawn). The embryonic stem cell in claim 14 wherein the human sperm cell and the human oocyte are derived from biological parents of the patient.

17 (withdrawn). The embryonic stem cell in claim 14 wherein the polynucleotide is able to express a gene product selected from a group consisting of an RNA and a protein.

18 (withdrawn). The embryonic stem cell in claim 14 wherein the embryonic stem cell has the ability to differentiate into different types of cells.

19 (withdrawn). The embryonic stem cells in claim 18 wherein the different types of cells are selected from a group consisting of myoblasts, hematopoietic stem cells, and neural stem cells.

20 (withdrawn). The embryonic stem cells in claim 14 the polynucleotide is linked to an external surface of the human sperm cell.

21 (withdrawn). The embryonic stem cells in claim 14 wherein the linker is an antibody.

22 (currently amended). An antibody characterized by having binding affinity to a sperm cell, wherein the sperm cell bound with the antibody retains the ability to fertilize an oocyte and the antibody comprises monoclonal antibody mAbC.

23 (previously presented). The antibody in claim 22 wherein the sperm cell is a human sperm cell.

24 (previously presented). The antibody in claim 22 wherein the sperm cell is selected from the group consisting of a mouse sperm cell, a bovine sperm cell, a pig sperm cell, a chicken sperm cell, a sheep sperm cell, and a goat sperm cell.

25 (previously presented). The antibody in claim 22 wherein the binding affinity to sperm cells is further characterized by the ability to bind to the sperm cells from a plurality of species of animal.

26 (previously presented). The antibody in claim 22 also exhibiting binding properties to a DNA such that upon fertilization, the DNA is introduced into the oocyte.